FIG.1 PRIOR ART

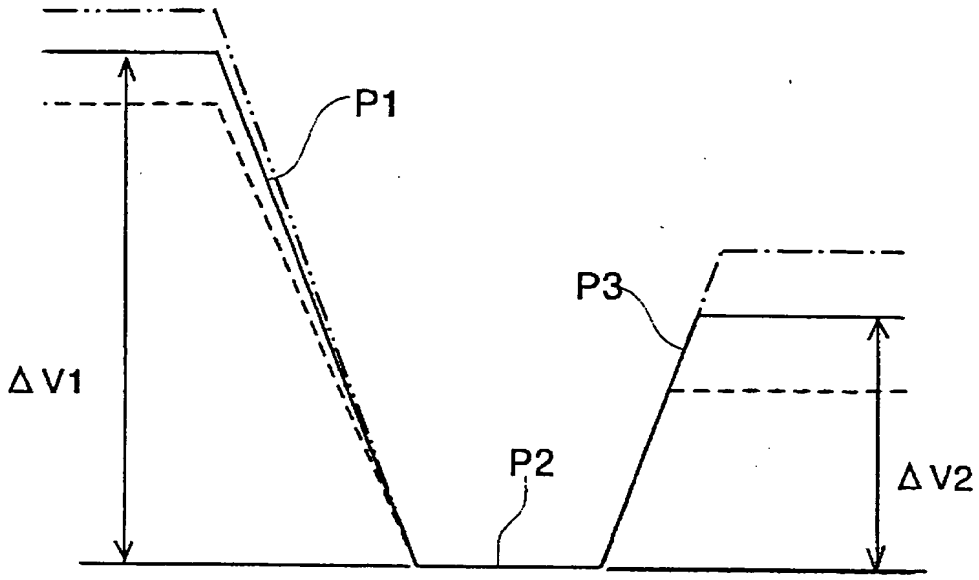


FIG.2 PRIOR ART

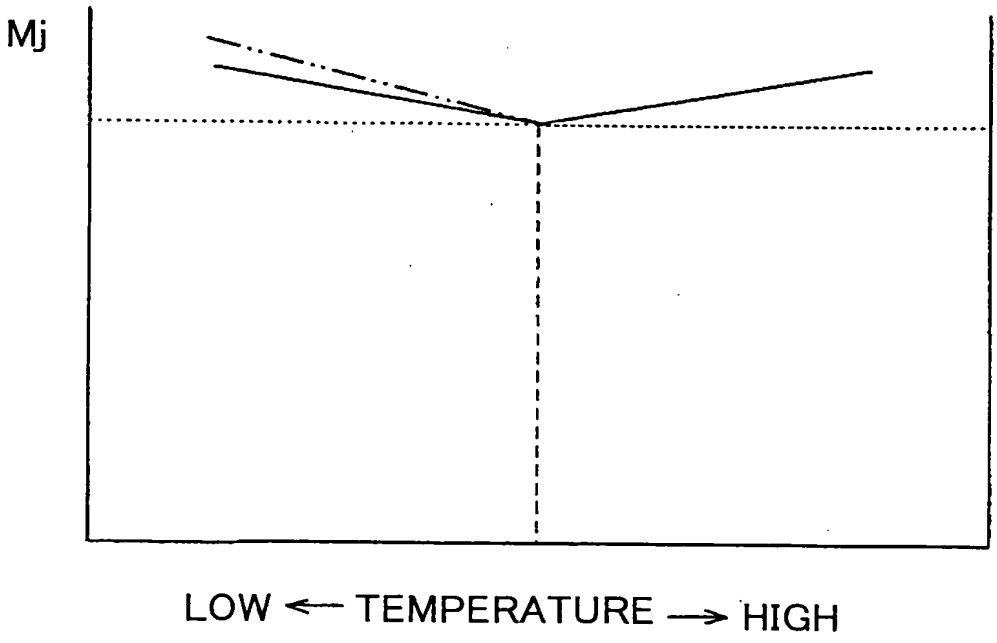


FIG.3

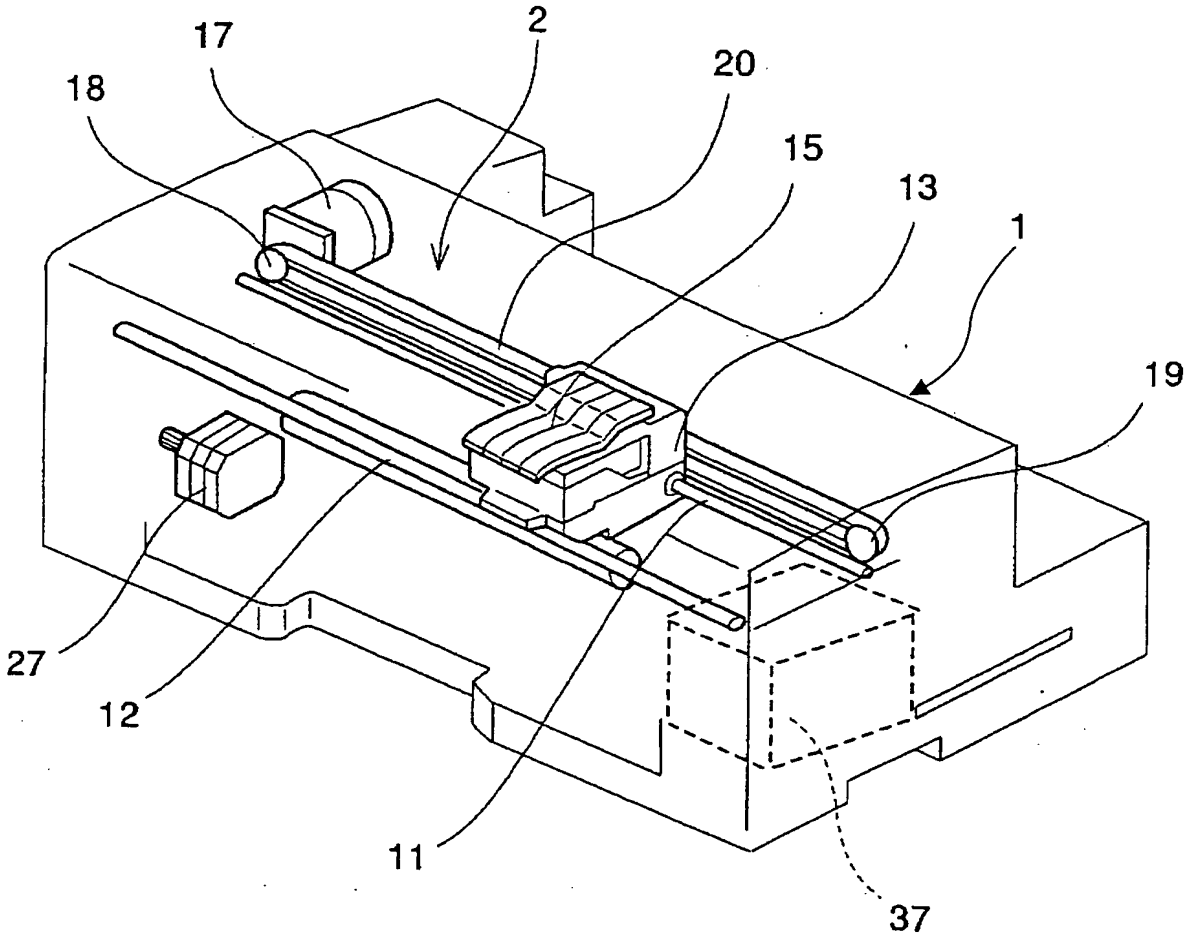
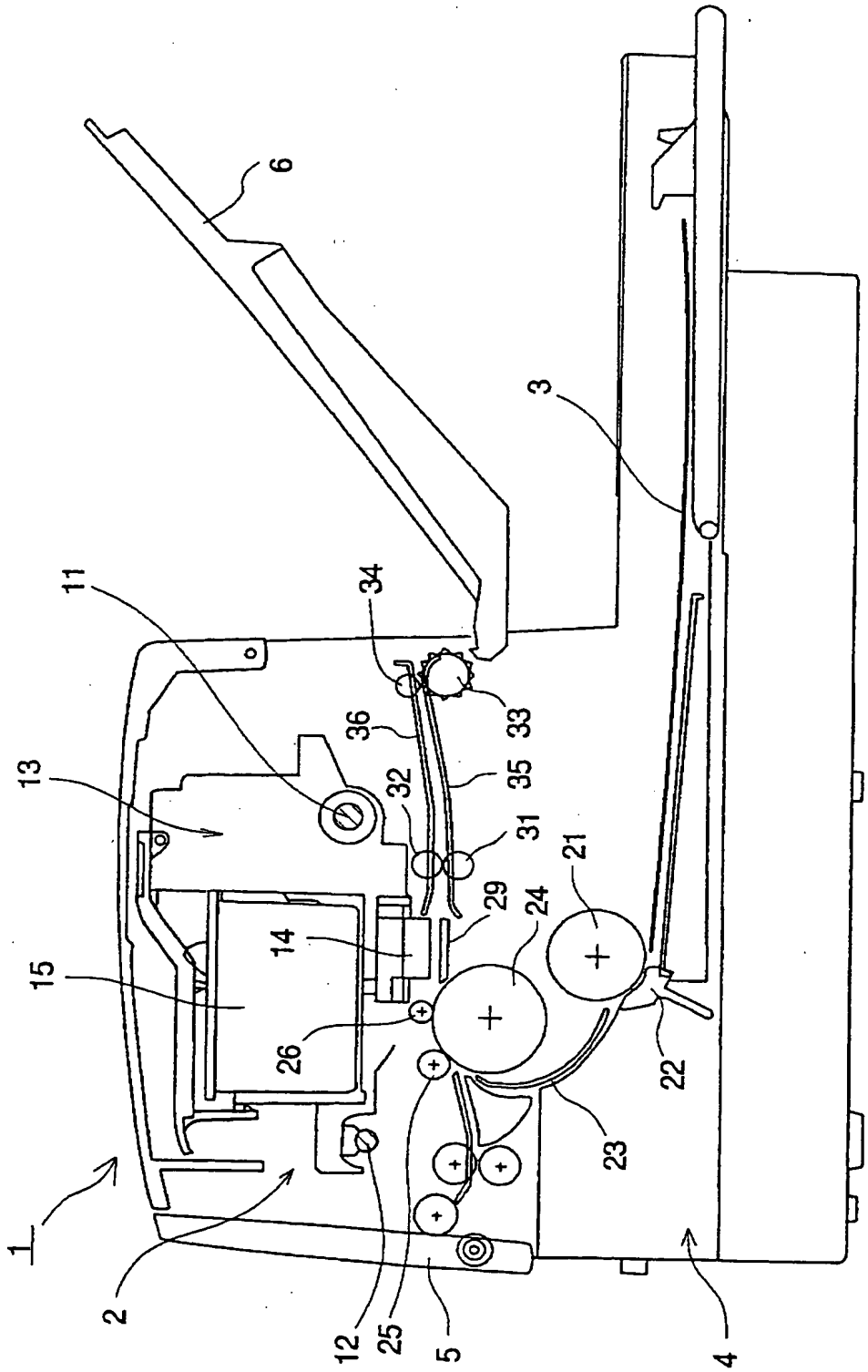


FIG.4



Best Available Copy

FIG.5

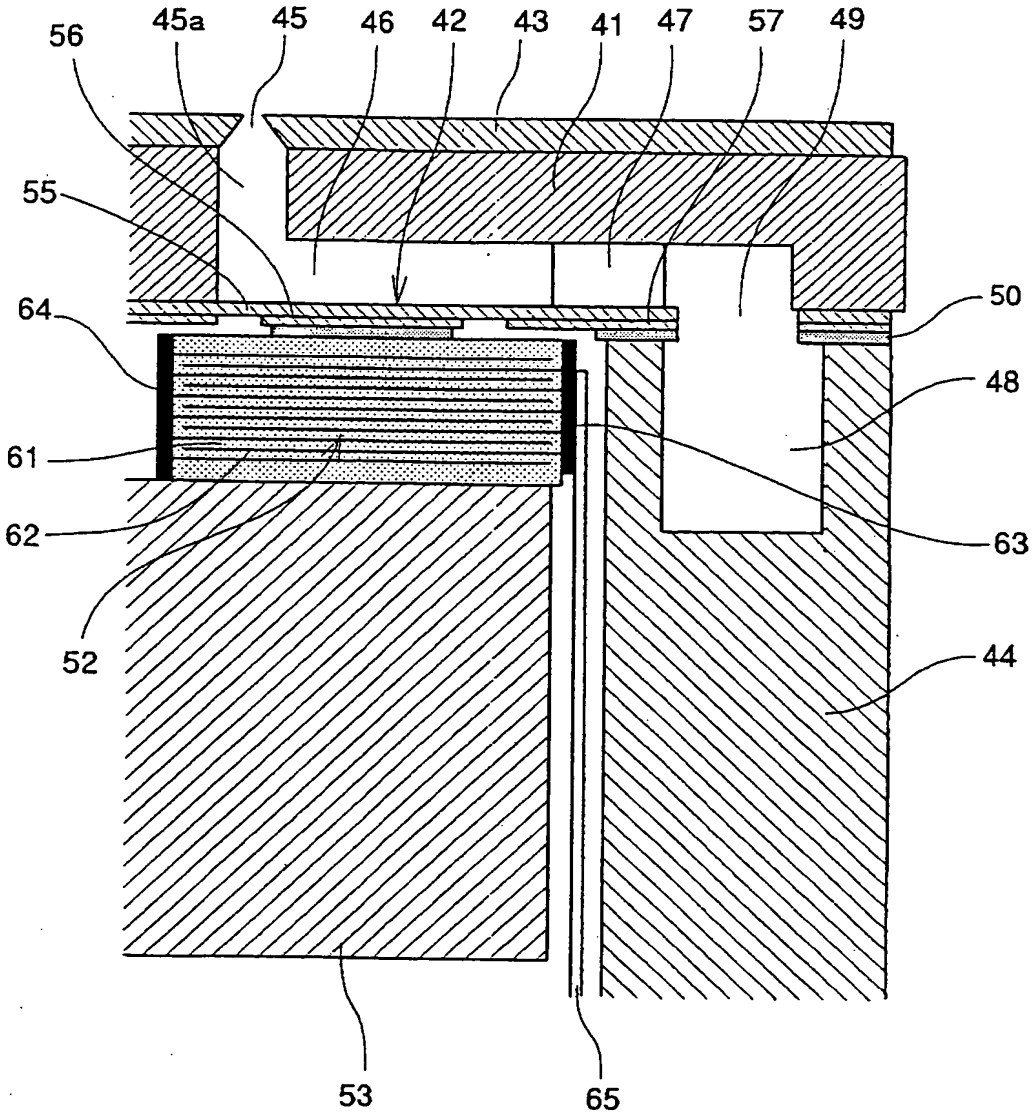


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FIG.6

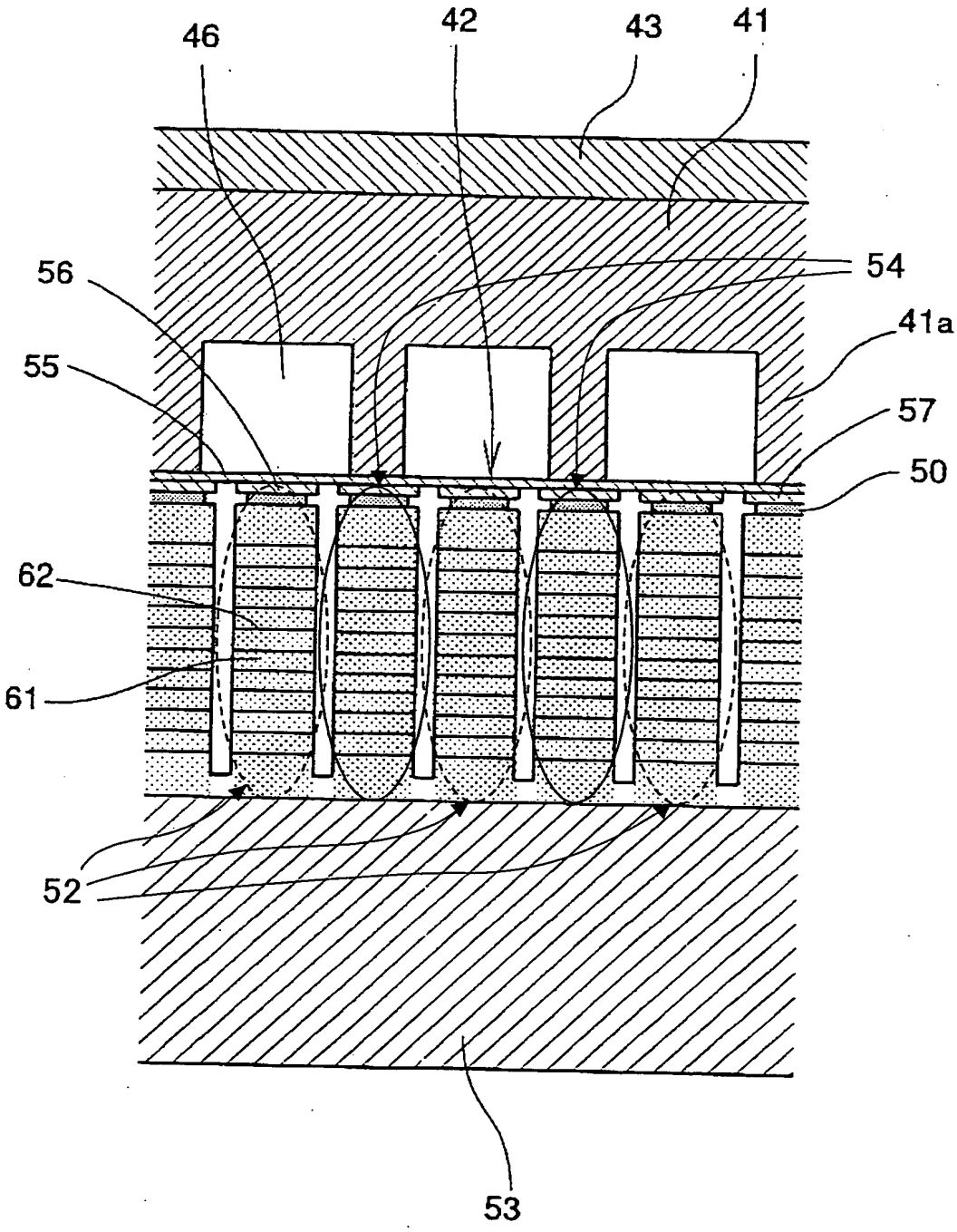

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FIG.7

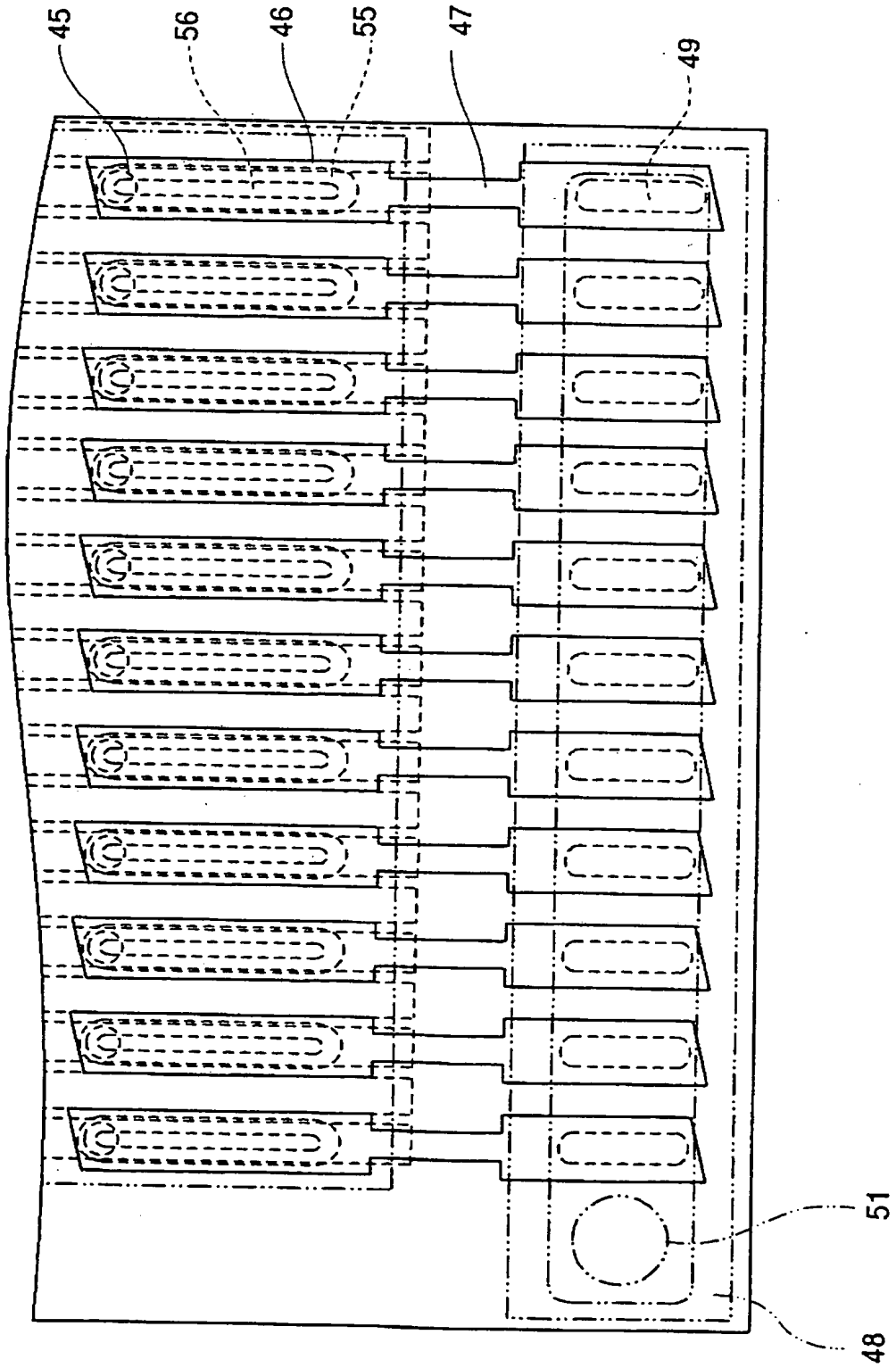

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FIG.8

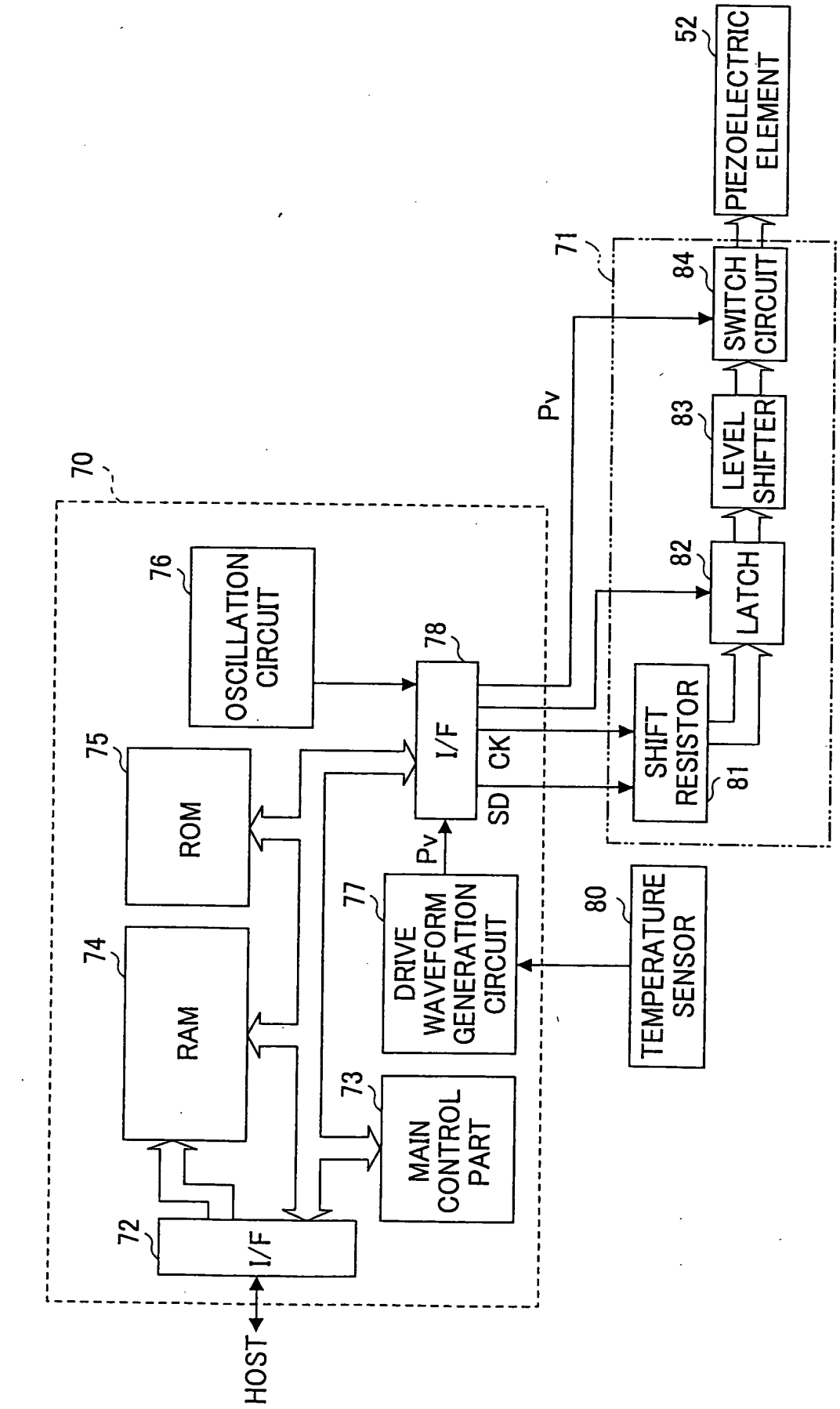
HOST
70
72
I/F
73
MAIN CONTROL PART
74
RAM
75
ROM
76
OSCILLATION CIRCUIT
77
DRIVE WAVEFORM GENERATION CIRCUIT
78
I/F
Pv
SD
CK
80
TEMPERATURE SENSOR
71
Pv
81
SHIFT RESISTOR
82
LATCH
83
LEVEL SHIFTER
84
SWITCH CIRCUIT
52
PIEZOELECTRIC ELEMENT

FIG.9

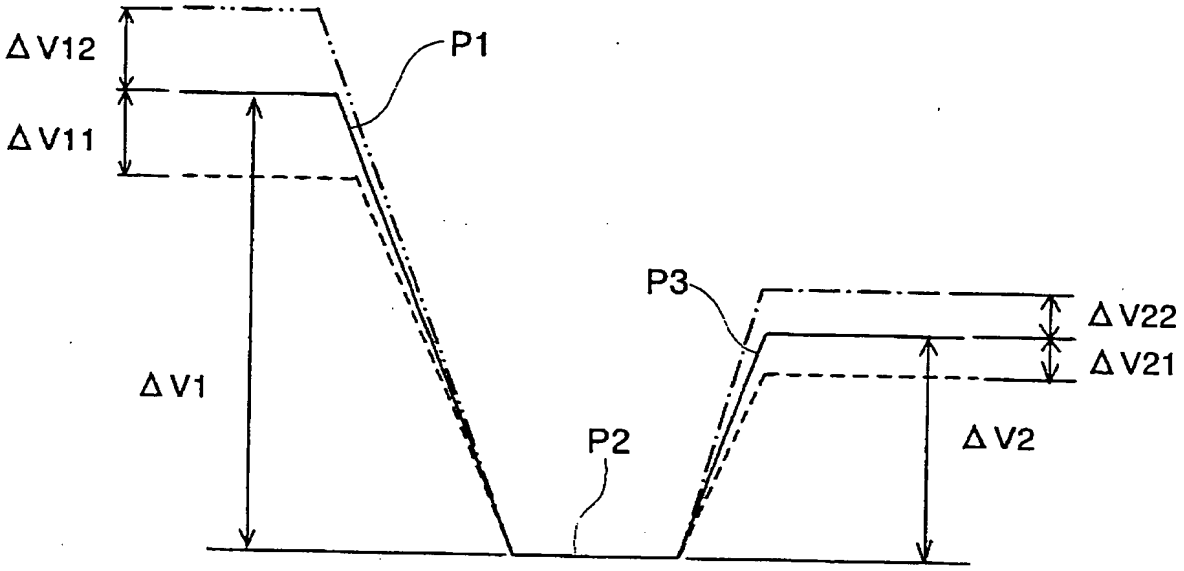
ΔV12
ΔV11
ΔV1
P1
P2
P3
ΔV22
ΔV21
ΔV2

FIG.10

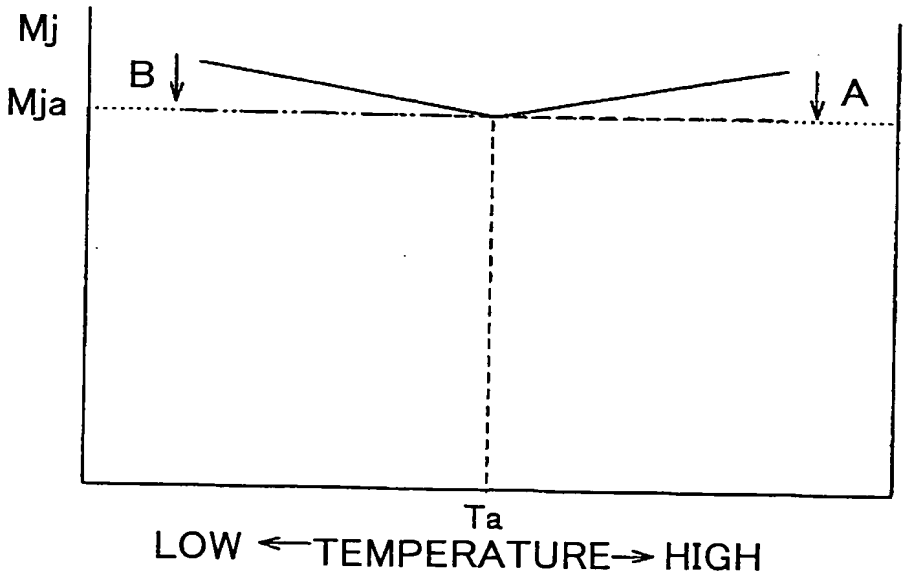
Mj
Mja
B
A
Ta
LOW ←TEMPERATURE→ HIGH

FIG.11

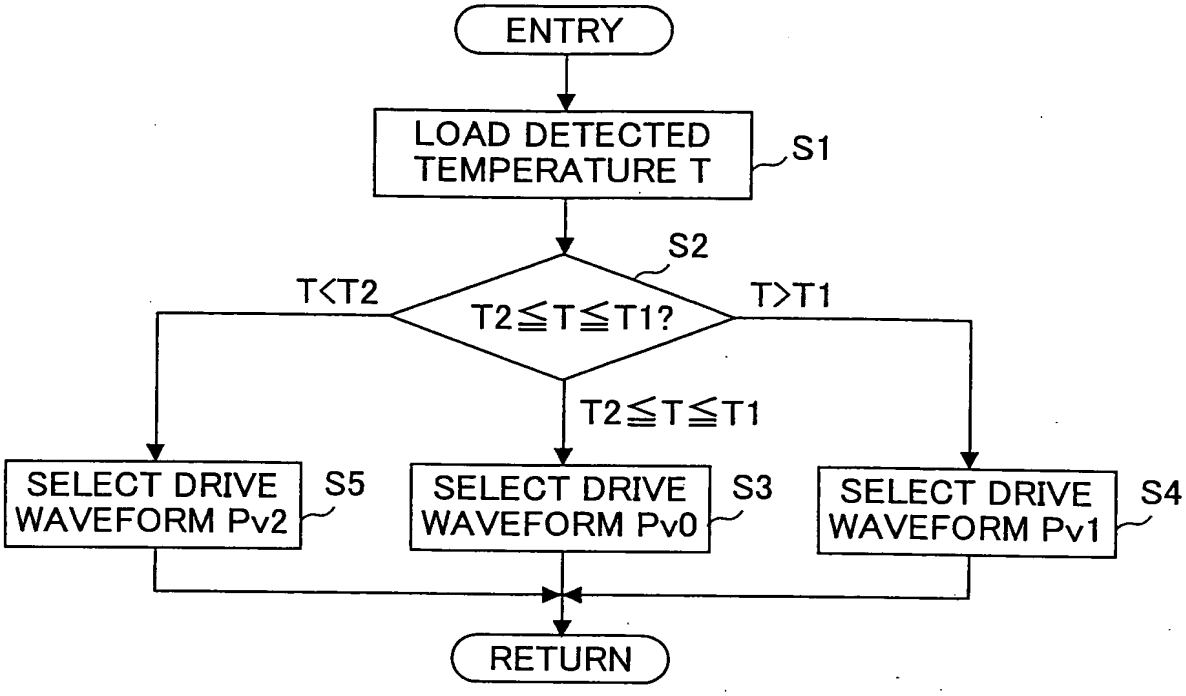
ENTRY
LOAD DETECTED TEMPERATURE T
S1
S2
T<T2
T2≦T≦T1?
T>T1
T2≦T≦T1
SELECT DRIVE WAVEFORM Pv2
S5
SELECT DRIVE WAVEFORM Pv0
S3
SELECT DRIVE WAVEFORM Pv1
S4
RETURN

FIG.12

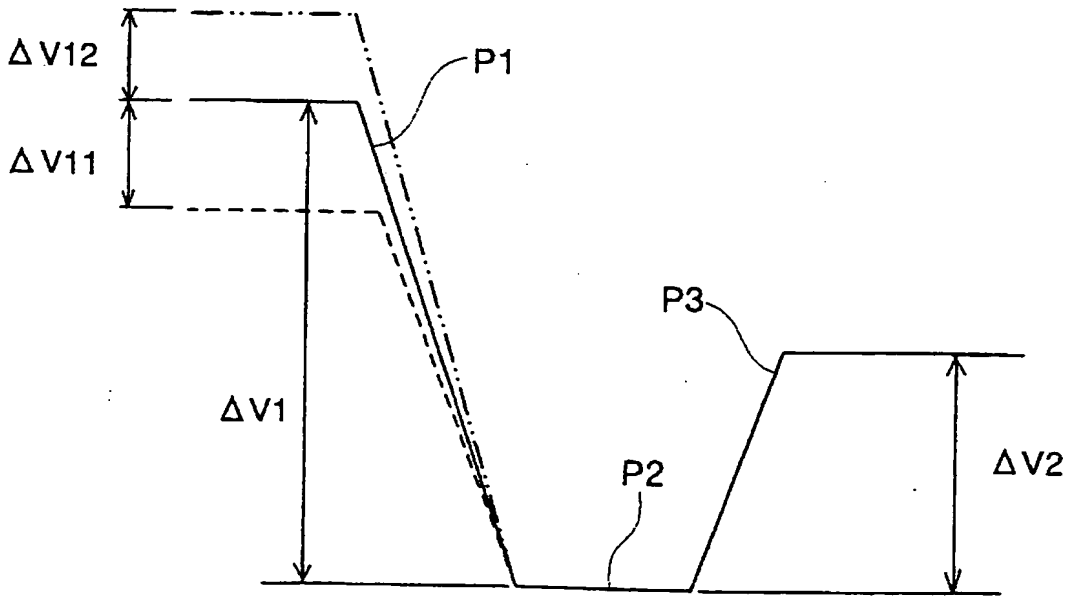
ΔV12
ΔV11
ΔV1
P1
P2
P3
ΔV2

FIG.13

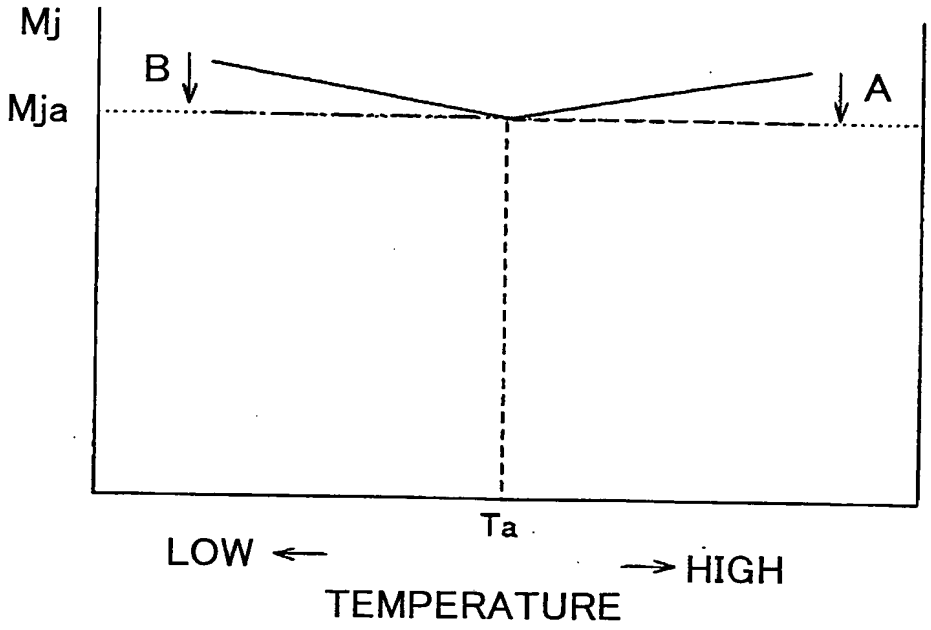

FIG.14

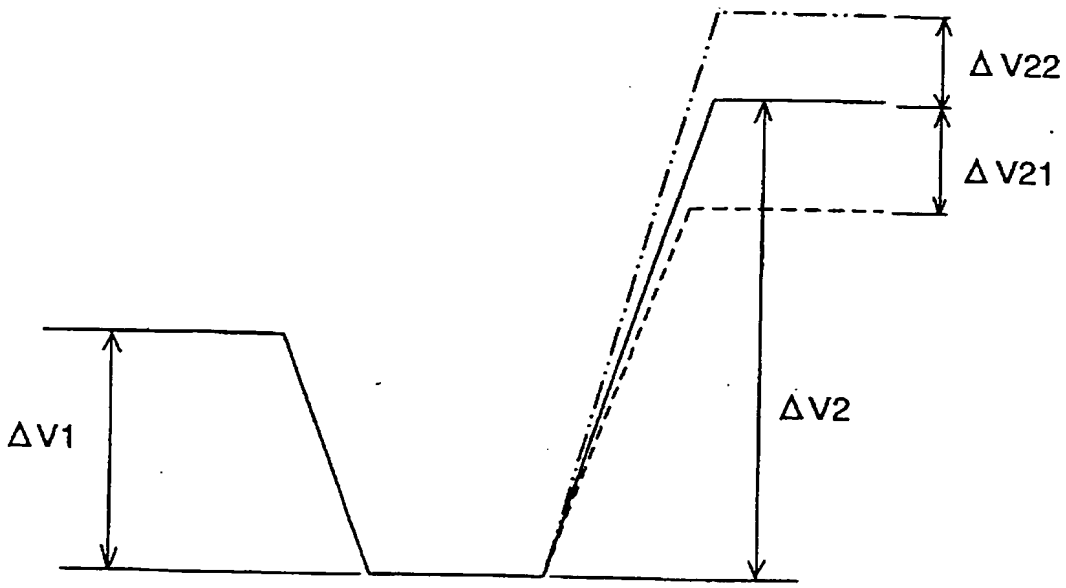
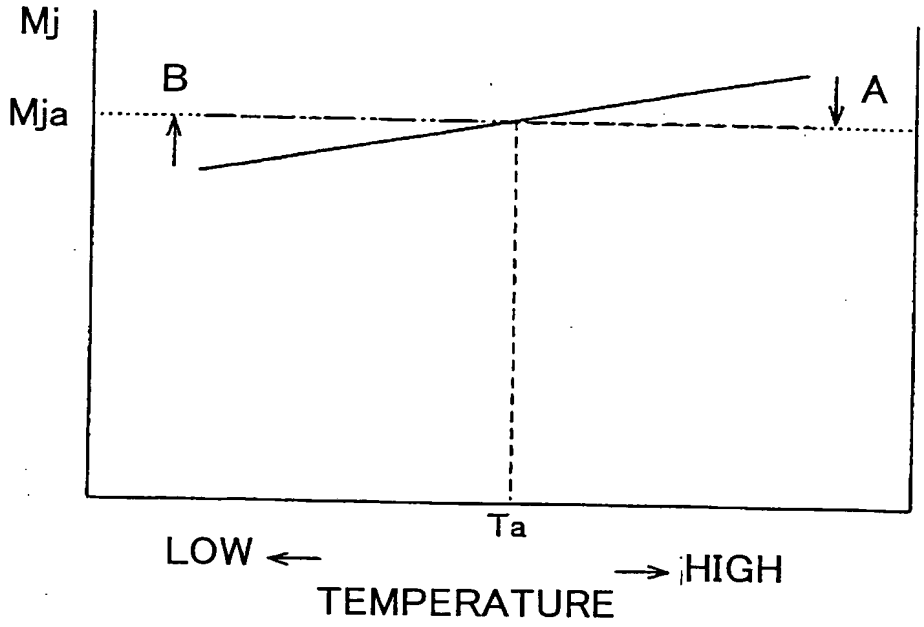
FIG.15